

B¹ with wire to form respective stator coils using a needle-based winding machine that is placed at the center of the stator structure.

- *On page 2, delete the third full paragraph, and replace this paragraph with the following:*

B² A recognized solution to this problem is to utilize what is referred to in the art as a segmented stator. According to this approach, the stator is constructed using a plurality of segments each of which defines a bobbin upon which wire is wound to form one of the coils of the motor. Typically, each segment is generally T-shaped when viewed from one end of the motor, with the bottom (vertical) leg of the T forming the bobbin upon which wire is wound to form one of the coils of the motor, and the top (horizontal) leg of the T being joined end to end with the top legs of the other T-shaped segments in the shape of a circle, thereby resulting in a circular stator when viewed from one end of the motor. This construction technique therefore results in a stator with an overall shape that is the same as that of an unsegmented stator.

In the Claims:

Please amend claims 1, 2, 4 and 6 as follows. The changes are shown explicitly in the attached "Version with Markings to Show Changes Made."

- B³
- 1 1. (Once Amended) A method of constructing a segmented wound
 - 2 member of an N phase electromechanical device, comprising:
 - 3 (A) winding N sets of segments, each segment of the N sets of
 - 4 segments defining a bobbin, the N sets of segments being
 - 5 wound with a single continuous length of wire for each set;
 - 6 and
 - 7 (B) combining the N sets of segments in a common circular
 - 8 arrangement to form the wound member; and
 - 9 wherein each of the N sets of segments is wound separately from
 - 10 remaining ones of the sets of segments and then combined in the common
 - 11 circular arrangement with the remaining ones of the sets of segments to form
 - 12 the wound member.

sub 17
2.

2 winding step includes

3 F1

- 3 (1) arranging a plurality of segments in a side-by-side
- 4 orientation along an axis of rotation, the plurality of
- 5 segments forming one of the N sets of segments;
- 6 (2) rotating the plurality of segments and a wire dispenser
- 7 relative to each other about the axis of rotation;
- 8 (3) winding the plurality of segments during the relative
- 9 rotation of the plurality of segments and the wire dispenser;
- 10 and
- 11 (4) repeating the arranging step (1), the rotating step (2) and
- 12 the winding step (3) for each of the remaining sets of
- 13 segments.

sub 22
4.

2 wound member of an electromechanical device, comprising:

- 3 (A) arranging a plurality of segments in a side-by-side
- 4 orientation along an axis of rotation, each segment of the
- 5 plurality of segments defining a bobbin;
- 6 (B) rotating the plurality of segments and a wire dispenser
- 7 relative to each other about the axis of rotation;
- 8 (C) winding the plurality of segments during the relative
- 9 rotation of the plurality of segments and the wire dispenser;
- 10 and
- 11 (D) combining the plurality of segments in a circular
- 12 arrangement to form the wound member.

6. (Once Amended) A method according to claim 4,
 wherein the arranging, rotating, winding and combining steps are
 performed N times, N being equal to a number of phases of the
 electromechanical device,
 wherein a total of N sets of M segments are wound for the
 electromechanical device, M being determined by a number of poles of the
 electromechanical device and being equal to the number of segments that are
 arranged, rotated, and wound during each performance of the arranging, rotating
 and winding steps, and
 wherein the N sets of M segments are combined into a common circular
 arrangement.

Please add the following new claims:

21. (New) A method according to claim 2, wherein, during the rotating
 step (2), relative rotation between the plurality of segments and the wire
 dispenser is established by virtue of the plurality of segments rotating and the
 wire dispenser remaining substantially stationary.

22. (New) A method according to claim 4, wherein, during the rotating
 step (B), relative rotation between the plurality of segments and the wire
 dispenser is established by virtue of the plurality of segments rotating and the
 wire dispenser remaining substantially stationary.

23. (New) A method of constructing a segmented wound member of
 an N phase electromechanical device, comprising:

- (A) winding N sets of segments, each segment of the N sets of
 segments defining a bobbin, the N sets of segments being
 wound with a single continuous length of wire for each set,
 the winding step including
- (1) arranging a plurality of segments in a side-by-side
 orientation along an axis of rotation, the plurality of
 segments forming one of the N sets of segments,
 - (2) rotating the plurality of segments about the axis of

11 rotation, and
12 (3) winding the plurality of segments, including
13 (a) winding a segment while the wire dispenser is
14 positioned adjacent the segment and the
15 segment is rotating, the segment being one of
16 the plurality of segments, then
17 (b) if a next segment of the plurality of segments
18 remains to be wound, then moving the wire
19 dispenser in a direction parallel to the axis of
20 rotation to a position adjacent the next
21 segment, and then returning to the winding
22 step (A)(3)(a) to wind the next segment, such
23 that the winding step (A)(3)(a) and the
24 moving step (A)(3)(b) are performed until all
25 of the segments of the plurality of segments
26 have been wound, and
27 (4) repeating the arranging step (A)(1), the rotating step
28 (A)(2), and the winding step (A)(3) for each of the
29 remaining sets of segments; and
30 (B) combining the N sets of segments in a common circular
31 arrangement to form the wound member; and
32 wherein each of the N sets of segments is wound separately from
33 remaining ones of the sets of segments and then combined in the common
34 circular arrangement with the remaining ones of the sets of segments to form
35 the wound member.